What is claimed is:

1. An apparatus for reducing windage-induced vibration in a disc drive having a rotating disc, the apparatus comprising:

a load beam;

a trench arrangement on the load beam; and

a circuit housed within the trench arrangement.

2. The apparatus of claim 1 further including a plate coupled to the load beam, wherein the circuit is between the load beam and the plate.

3. The apparatus of claim 1, wherein the load beam is made from a laminate material.

4. The apparatus of claim 3, wherein the laminate material includes a bottom steel layer, a core polyimide layer, and a top steel layer.

5. The apparatus of claim 4, wherein the bottom steel layer has a thickness in the range of about 20 to 75 μm, the core polyimide layer has a thickness in the range of about 10 to 125 μm, and the top steel layer has a thickness in the range of about 20 to 75 μm.

6. The apparatus of claim 4, wherein the bottom steel layer has a thickness of about 30 μm, the core polyimide layer has a thickness of about 75 μm, and the top steel layer has a thickness of about 30 μm.

7. A disc drive system comprising:

a rotating disc having an inner and an outer diameter;

a suspension assembly for supporting a head over the disc, the suspension assembly having;

a load beam comprising a laminate material;

a trench arrangement formed in the load beam; and

a circuit housed within the trench arrangement.

8. The system of claim 7 including a plate coupled to the load beam, wherein the circuit is between the load beam and the plate.

9. The system of claim 7 wherein the laminate material includes a bottom steel layer, a middle polyimide layer, and a top steel layer.

10. The system of claim 9 wherein the bottom steel layer has a thickness in the range of about 20 to 75 μm, the core polyimide layer has a thickness in the range of about 10 to 125 μm, and the top steel layer has a thickness in the range of about 20 to 75 μm.

11. The system of claim 8 wherein the load beam comprises a gimbal portion, a bend section, and a base portion, the gimbal portion supporting the head and the bend section being positioned between the base portion and the gimbal portion, and the trench arrangement includes a trench that extends from the bend section and through at least a part of the base portion.

12. A suspension assembly configured to reduce windage-induced vibration in a head supported by the suspension assembly, comprising:

a base plate;

a load beam mounted to the base plate and having a length, the load beam comprising a laminate material, the laminate material having a bottom layer a top layer, and a core layer positioned between the top and bottom layers, the load beam further comprising a trench formed in the laminate material and extending along at least a portion of the length of the load beam; and

an interconnect circuit mounted to the load beam in at least a portion of the trench.

13. The assembly of claim 12 wherein the load beam is secured to the base plate at the bottom layer of the laminate material.

14. The assembly of claim 12 wherein the trench is formed in the bottom and core layers of the laminate material.

15. The assembly of claim 12 wherein the interconnect circuit includes a first portion and a second portion, and the load beam further comprises an exposed primary surface and a leeward edge, the first portion being mounted in the trench, and the second portion extending along the leeward edge of the load beam.

16. The assembly of claim 12 wherein the top layer comprises steel, the core layer comprises a polymer material, and the top layer comprises steel.

17. The assembly of claim 12 wherein the load beam includes a first end supporting the head, a second end adjacent the base plate, and a bend section between the first and second ends, and the trench extends from the second end to the bend section.

18. The assembly of claim 12 wherein the interconnect circuit is a flex-on-suspension circuit.

19. The assembly of claim 12 wherein the load beam further comprises a boss aperture configured to mount the suspension assembly to a support arm having a boss, and the trench extends around the boss aperture.

20. A method of forming a suspension assembly that is resistant to windage-induced vibrations, the suspension assembly comprising a load beam constructed of a

laminate material and having a length, an interconnect circuit, and a base plate, the method comprising the steps of:

etching layers of the laminate material;

assembling the etched layers into a composite material, the assembled layers defining a trench that extends along a portion of the load beam length;

securing a first portion of the interconnect circuit in the trench; and

mounting the load beam to the base plate so that the first portion of the interconnect in the trench is positioned between the load beam and the base plate.

21. The method of claim 20 wherein the load beam further includes a leeward edge and a primary exposed surface, and the interconnect circuit further includes a second portion, the method further comprising the step of securing the second portion of the interconnect circuit to the leeward edge and the exposed primary surface of the load beam.

22. The method of claim 20 wherein the laminate material comprises top, bottom, and core layers, and the etching step includes etching trenches in the core and bottom layers.

23. The method of claim 20 wherein the etching step includes etching a bottom layer and a top layer from a sheet comprising steel, and etching a core layer from a sheet comprising a polymer material.

24. The method of claim 20 wherein the laminate material includes bottom, top, and core layers, and the mounting step includes mounting the bottom layer to the base plate.

25. The method of claim 20 wherein the load beam includes a first end configured to support a disc drive head, a second end positioned adjacent the base plate,

and a bend section positioned between the first and second ends, and the trench extends from the second end to the bend section of the load beam.